

Work Order ID 154432

Tuesday, December 13, 2016 8:01:34 AM

154432

Page 1

Item ID: D3551-11 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Hook And Loop Tie
Start Date: 12/13/2016 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 12/28/2016 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: DAS 13 9-89 Date: DEC 13 2016 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3551	Rev A

100 PURCHASING 0.00 DAS 13 9-89
100
Purchasing Memo 0.00 10 DEC 14 2016
Purchasing Issue P/O: 31640 Purchase Part Number: 6605K56 Supplier: Mc
Master CarrCertificate of conformity is required

110 Receive & Inspect for Damage & Mat'l Certs 0.00
110
Packaging Memo 0.03 10x SP/6-12-15
Packaging Ensure certificate of conformity is attached

120 QC6- Inspect dimensions to drawing 0.00
120
QC Memo 0.00 (10) 16-12-15 DAS 9 9-89
Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								

Work Order ID 154432

Tuesday, December 13, 2016 8:01:34 AM

154432

Page 2

Item ID: D3551-11 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Hook And Loop Tie
Start Date: 12/13/2016 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 12/28/2016 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>5416</u>	0.00							
130									
Packaging	Memo	0.02				<u>10</u>	<u>6</u>		
Packaging							<u>9-89</u>		DEC 21 2016
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.17							
Quality Control									

DEC 21 2016

DAS
21
9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process								
Misidentified ☐	☐ Past Due	OTHER :							

Picklist Print

Tuesday, December 13, 2016 8:01:33 AM

Page 1

Work Order ID: 154432

154432

Parent Item: D3551-11

D3551-11

Parent Item Name: Hook And Loop Tie

Start Date: 12/13/2016

Required Date: 12/28/2016

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A New Issue 06-09-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

6605K56

Purchased

No

110

Each

0.0000

1

10

6605K56

HOOK AND LOOP TIE

10 x 50/6-12-10.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

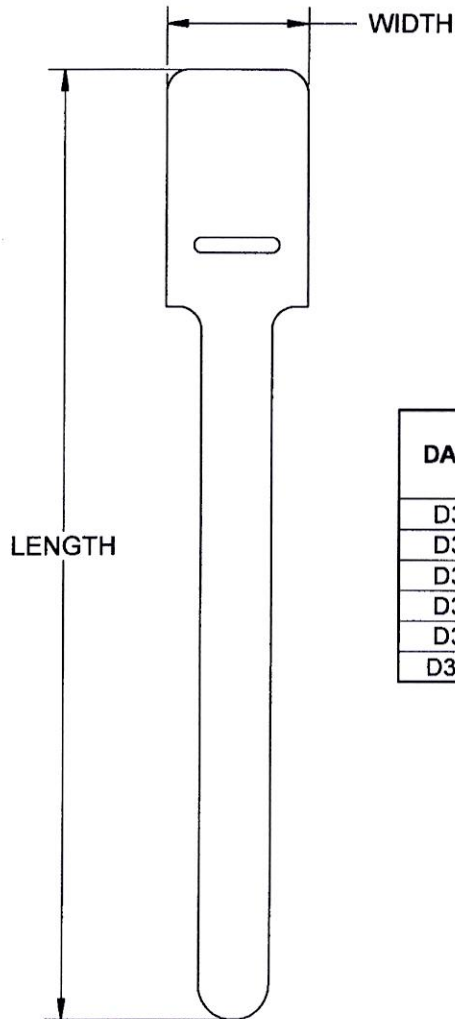
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					



DESIGN <i>LE</i>	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>qp</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3551	REV. A SHEET 1 OF 1
DATE 06.08.28		TITLE HOOK AND LOOP TIE SCALE NTS	
REV A	DATE 06.08.28	DESCRIPTION NEW ISSUE	

SPECIFICATION CONTROL DRAWING



W/O: 154432

DEC 13 2016

DAS
13
9-89

DART P/N	LENGTH (in)	WIDTH (in)	MCMMASTER-CARR P/N	SPEEDTECH P/N
D3551-1	6	1	6605K51	SW.75X6BK889
D3551-3	8	1	6605K52	SW.75X8BK889
D3551-5	11	1	6605K53	SW.75X11BK889
D3551-7	15	1.5	6605K54	SW1.5X15BK889
D3551-9	18	1.5	6605K55	SW1.5X18BK889
D3551-11	24	1.5	6605K56	SW1.5X24BK889

D3551-X HOOK AND LOOP TIE

MATERIAL: BLACK BACK-TO-BACK HOOK AND LOOP MATERIAL, FLAME-RETARDANT NYLON

COPYRIGHT © 2006 BY DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34640**

Purchase Order Date 12/14/2016

PO Print Date 12/14/2016

Page Number 2 of 3

Order From :

VU-MCM001

Ship To : DART AEROSPACE LTD

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

330 995 5500

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

3	92311A639	SS SET SCREW	12/16/2016	50.00		\$0.66	\$33.10
			Yes	Each			
			12/16/2016				

AS PER DWG D2747 REV. B
B154433

Line Total: \$33.10

4	6605K56	HOOK AND LOOP TIE	12/16/2016	10.00		\$2.78	\$27.78
			Yes	Each			
			12/16/2016				

AS PER DWG D3551 REV. A
B154432

Line Total: \$27.78

5	59915K274	Rod End Bearing	12/16/2016	10.00		\$19.05	\$190.50
			Yes	Each			
			12/16/2016				

AS PER DWG D4777 REV. A
B154431

Line Total: \$190.50

Note:

12/14/2016



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada
Attention: Dart Aerospace Ltd
J-Luc

Purchase Order
PO34640

Order Placed By
Chantal Lavoie

McMaster-Carr Number
4563230-01

Page 1 of 1

12/14/2016

Line	Product	Ordered	Shipped
1	5155T28 Laboratory Tygon PVC Tubing for Chemicals 1/4" ID, 1/2" OD, 10 Feet Long	50 Feet	50
2	95606A170 Nylon Plastic Washer for 7/16" Screw Size, 0.5" ID, 0.688" OD, Off-White, Packs of 100	1 Pack	1
3	92311A639 18-8 Stainless Steel Cup Point Set Screw 3/8"-24 Thread, 1" Long, Packs of 10	5 Packs	5
4	6605K56 Hook and Loop Cable Ties 24" Overall Length, Meets UL 94V2, Packs of 5	2 Packs	2
5	59915K274 PTFE-Lined Stainless Steel Ball Joint Rod End 3/8"-24 RH Male Shank, 3/8" Ball ID, 1-1/4" Long Thread	10 Each	10
6	3106A24 High-Speed Steel Spiral Fractional Chucking Reamer 1/4" Diameter, 1-1/2" Flute Length	2 Each	2

DAS
9-89

SP/16-12-15

McMaster-Carr Supply Company
200 Aurora Industrial Pkwy
Aurora, OH 44202-8087 USA
Phone: 330-995-5500 Fax: 330-995-9600
E-Mail: cle.sales@mcmaster.com
Employer Identification Number (EIN): 36-1458720

Invoice: 93130298
Purchase Order: PO34640
Release:
McMaster-Carr Number: 4563230-01

ORIGINAL COMMERCIAL
INVOICE
CERTIFICATE OF ORIGIN

Ultimate Destination:
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Shipped: 14-Dec-2016 FOB: ORIGIN
Shipper's Export Declaration (SED):
NO EEI 30.36

Intermediate Consignee:

Bill To:
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Tax Number:

Forwarding Agent:

Billing
Attention:
Shipping Dart Aerospace Ltd
Attention: J-Luc
Contact:

Line	Description	Qty & Unit	Unit Price	Extension
1	5155T28 Laboratory Tygon PVC Tubing for Chemicals 1/4" ID, 1/2" OD, 10 Feet Long Country of Origin: United States Schedule B #: 391732 ECCN #: EAR99 NLR	50 FT	\$3.17	\$158.50
2	95606A170 Nylon Plastic Washer for 7/16" Screw Size, 0.5" ID, 0.688" OD, Off-White, Packs of 100 Country of Origin: United States Schedule B #: 392690 ECCN #: EAR99 NLR	1 PK	\$8.60	\$8.60
3	92311A639 18-8 Stainless Steel Cup Point Set Screw 3/8"-24 Thread, 1" Long, Packs of 10 Country of Origin: Taiwan Schedule B #: 731815 ECCN #: EAR99 NLR	5 PK	\$6.60	\$33.00
4	6605K56 Hook and Loop Cable Ties 24" Overall Length, Meets UL 94V2, Packs of 5 Country of Origin: United States Schedule B #: 392690 ECCN #: EAR99 NLR	2 PK	\$13.90	\$27.80
5	59915K274 PTFE-Lined Stainless Steel Ball Joint Rod End 3/8"-24 RH Male Shank, 3/8" Ball ID, 1-1/4" Long Thread Country of Origin: United States Schedule B #: 848330 ECCN #: EAR99 NLR	10 EA	\$19.05	\$190.50
Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.				

Shipping Weight (in kgs): 4

Number of Packages: 1

Invoice Amounts:

Merchandise Amount: \$455.90
Total (in USD): \$455.90

Package Dimensions:

47 X 21 X 17 CM = .017 CUBIC M

Payment Terms: 2% discount on merchandise only if paid within 10 days, net 30 days

Authorized Signature:

Date: 14-Dec-2016

Remit payment to:
(by mail)
McMaster-Carr Supply Company
PO Box 7690
Chicago, IL 60680-7690 USA

(by wire transfer)
Bank of America
222 Broadway
New York, NY 10038
Account 86666-02021
SWIFT BOFAUS3N

Name: Sarah Weinberg

Title: Operations Mgr.

Page 1 of 2

McMaster-Carr Supply Company
 200 Aurora Industrial Pkwy
 Aurora, OH 44202-8087 USA
 Phone: 330-995-5500 Fax: 330-995-9600
 E-Mail: cle.sales@mcmaster.com
 Employer Identification Number (EIN): 36-1458720

Invoice: 93130298
 Purchase Order: PO34640
 Release:
 McMaster-Carr Number: 4563230-01

ORIGINAL COMMERCIAL
INVOICE
 CERTIFICATE OF ORIGIN

Line	Description	Qty & Unit	Unit Price	Extension
6	3106A24 ✓ High-Speed Steel Spiral Fractional Chucking Reamer 1/4" Diameter, 1-1/2" Flute Length Country of Origin: United States Schedule B #: 820760 ECCN #: EAR99 NLR NOTE These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations. NOTE Tracking number(s) for this shipment: 633862474262	2 ✓ EA	\$18.75	\$37.50

SP16-1270